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EXAMINER	
ADDY, ANTHONY S	

ART UNIT	PAPER NUMBER
2681	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/785,225	CHOI ET AL.	
	Examiner	Art Unit	
	Anthony S. Addy	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 15, 16, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by **Back et al., U.S. Publication Number 2004/0156329 A1 (hereinafter Back)**.

Regarding claim 15, Back discloses a method for handing over a terminal from a first base station to a second base station in a mobile communication system while the terminal is in communication with the first base station (see p. 5 [0071-0072], p. 6 [0088-0095] and Fig. 2; shows a UMTS to GSM handover involving mobile station 1), said mobile communication system including said first base station for providing a communication service in a first communication mode, a first base station controller connected with said first base station (see p. 4 [0055] and Fig. 2; shows a UMTS radio access network (UTRAN) including radio network controller (RNC) 7 connected with base station (BTS) 6), said second base station for providing a communication service in a second communication mode, said second communication mode being different from said first communication mode, and a second base station controller connected

with said second base station (see p. 4 [0057] and Fig. 2; shows a GSM radio access network 9 including base station controller (BSC) 11 connected with base station (BTS) 10), said method comprising a) receiving from said first base station controller a notification that said terminal must hand over from said first base station to said second base station (see p. 6 [0089] and Fig. 5; message 1); and b) performing an initialization operation for communication with said second base station in said second communication mode upon receiving said notification, and then notifying said first base station controller that said terminal is ready to communicate in said second communication mode (see p. 6 [0089-0092]).

Regarding claim 16, Back teaches all the limitations of claim 15. In addition, Back teaches a method, further comprising the step of: c) releasing current communication of said terminal with said first base station after said terminal is ready to communicate in said second communication mode (see p. 6 [0095]).

Regarding claim 18, Back discloses a method for handing over a terminal from a first base station to a second base station in a mobile communication system while the terminal is in communication with the first base station (see p. 5 [0071-0072], p. 6 [0088-0095] and Fig. 2; shows a UMTS to GSM handover involving mobile station 1), said mobile communication system including said first base station for providing a communication service in a first communication mode, a first base station controller connected with said first base station (see p. 4 [0055] and Fig. 2; shows a UMTS radio access network (UTRAN) including radio network controller (RNC) 7 connected with base station (BTS) 6), said second base station for providing a communication service

in a second communication mode, said second communication mode being different from said first communication mode, and a second base station controller connected with said second base station (see p. 4 [0057] and Fig. 2; shows a GSM radio access network 9 including base station controller (BSC) 11 connected with base station (BTS) 10), said method comprising: a) notifying said terminal that said terminal will hand over from said first base station to said second base station upon determining that said terminal must hand over from said first base station to said second base station (see p. 6 [0092] and Fig. 5; message 5); and b) controlling said second base station controller to set up a call with said terminal upon receiving from said terminal a notification about the fact that said terminal is ready to communicate in said second communication mode (see p. 6 [0093-0095]).

Regarding claim 20, Back teaches all the limitations of claim 18. In addition, Back teaches a method, further comprising: c) releasing current communication of said terminal based on said first communication mode upon receiving from said terminal said notification about the fact that said terminal is ready to communicate in said second communication mode (see p. 6 [0095]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Back et al., U.S. Publication Number 2004/0156329 A1 (hereinafter Back)** and further in view of **Jain et al., U.S. Publication Number 2003/0114155 A1 (hereinafter Jain)**.

Regarding claim 1, Back teaches a method for handing over a terminal from a first base station to a second base station in a mobile communication system while the terminal is in communication with the first base station (see p. 5 [0071-0072], p. 6 [0088-0095] and Fig. 2; shows a UMTS to GSM handover involving mobile station 1), wherein said mobile communication system includes said first base station for providing a communication service in a first communication mode, a first base station controller connected with said first base station and a first mobile switching center (see p. 4 [0055] and Fig. 2; shows a UMTS radio access network (UTRAN) including anchor MSC-A, and radio network controller (RNC) 7 connected with base station (BTS) 6), said second base station for providing a communication service in a second communication mode, said second communication mode being different from said first communication mode (see p. 4 [0057] and Fig. 2 [i.e. the second base station (GSM BSS 10) is different from the first base station (UMTS BTS 6), since UMTS and GSM support different communication standards), a second base station controller connected with said second base station and a second mobile switching center (see p. 4 [0057] and Fig. 2; shows a GSM radio access network 9, including relay MSC-B and base station controller (BSC) 11 connected with base station (BTS) 10); and wherein said method comprises: a) controlling said terminal by said first base station controller such that said terminal

performs an initialization operation based on said second communication mode with said second base station, upon determining that said terminal must hand over to said second base station (see p. 6 [0088-0089] and Fig. 5); b) notifying said first mobile switching center by said first base station controller that said terminal has completed said second communication mode-based initialization operation, if said terminal completes said second communication mode-based initialization operation with said second base station (see p. 6 [0092-0095] and Fig. 5); d) controlling said second base station controller by said second mobile switching center such that said second base station pages said terminal (see p. 6 [0091-0092] and Fig. 5); and h) controlling said first base station controller by said first mobile switching center to cause said first base station controller to releases current communication of said terminal with said first base station, as said call setup with said terminal is completed (see p. 6 [0094-0095] and Fig. 5).

Back fails to explicitly teach a roaming gateway for performing a standard conversion operation with respect to messages transmitted and received between said first mobile switching center and said second mobile switching center, and wherein said method comprises: c) notifying said second mobile switching center by said first mobile switching center, via said roaming gateway that said terminal must hand over to said second base station; e) notifying said first mobile switching center by said second mobile switching center via said roaming gateway that said terminal is ready to hand over to said second base station, upon recognizing that said second base station controller has completed the paging of said terminal; f) controlling said second mobile

switching center by said roaming gateway, such that said second base station controller sets up a call with said terminal, as said terminal is ready to hand over to said second base station; g) notifying said first mobile switching center by said second mobile switching center via said roaming gateway that the call setup with said terminal has been completed, upon recognizing that said second base station controller has completed said call setup with said terminal;

However, the use of a roaming gateway for performing a standard conversion operation and an address mapping with respect to messages transmitted and received between a first and second mobile switching center supporting different technologies is very well known in the art as taught for example by Jain. Jain teaches a method and system for a GSM mobile station roaming to an IS-41 system, wherein a roaming gateway interfaces between a CDMA mobile switching center (MSC) and a GSM core infrastructure to enable a mobile station subscribed in the GSM core infrastructure to communicate using the CDMA MSC (see p. 1 [0008] and Fig. 1; shows a roaming gateway 32 interfacing IS-41 MSC and GSM core 14 [i.e. includes a GSM MSC]). According to Jain, when a GSM subscribed MS 12 roams into a CDMA area supported by an IS-41 MSC 22, the IS-41 MSC 22 accesses the roaming gateway by sending an authorization request along with the IMSI of the GSM subscribed MS 12 (see p. 2 [0024 & 0026]). Jain further teaches the roaming gateway accesses the GSM core infrastructure and obtains necessary authentication information, and the authentication information is used by the roaming gateway to determine whether the GSM subscribed MS 12 has been authenticated as a subscriber in the GSM core infrastructure (see p. 2

[0026-0027]). According to Jain, assuming authentication is successful, the roaming gateway informs the IS-41 MSC 22 to provide service to the MS 12 by sending the MSC 22 a location message that functions as a registration response, and in this way, the MS 12 essentially is registered with the IS-41 MSC 22 that is associated with the CDMA core infrastructure (see p. 2 [0027]).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using a roaming gateway for performing a standard conversion operation and an address mapping with respect to messages transmitted and received between a first and second mobile switching center supporting different networks of Jain, to the method of performing a handover between a plurality of different networks of Back, to include a roaming gateway for performing a standard conversion operation with respect to messages transmitted and received between a first and second mobile switching center supporting different networks, in order to permit a seamless use of a dual mode GSM subscribed mobile station when the mobile station roams into a CDMA area, and without requiring a subscription in both a CDMA core and a GSM core as per the teachings of Jain (see p. 1 [0007]).

Regarding claim 8, Back teaches a system for handing over a terminal from a first base station to a second base station in a mobile communication system while the terminal is in communication with the first base station (see p. 5 [0071-0072], p. 6 [0088-0095] and Fig. 2; shows a UMTS to GSM handover involving mobile station 1), said first base station providing a communication service in a first communication mode, said second base station providing a communication service in a second

communication mode, said second communication mode being different from said first communication mode (see p. 4 [0055 & 0057] and Fig. 2 [i.e. the second base station (GSM BSS 10) is different from the first base station (UMTS BTS 6), since UMTS and GSM support different communication standards), said system comprising: a first base station controller for controlling said terminal upon determining that said terminal must hand over to said second base station (see p. 6 [0088-0089] and Fig. 2; shows a source UMTS RNC 6 [i.e. reads on a first base station controller]), such that said terminal performs an initialization operation based on said second communication mode with said second base station (see p. 6 [0088-0089] and Fig. 5), notifying a first mobile switching center that said terminal has completed said second communication mode-based initialization operation (see p. 6 [0092-0095] and Fig. 5), upon recognizing that said terminal has completed said second communication mode-based initialization operation, and then releasing a call currently set up with said terminal if said terminal hands over to said second base station (see p. 6 [0094-0095] and Fig. 5); said first mobile switching center for notifying a second mobile switching center to which said second base station belongs that said terminal must hand over to said second base station, upon recognizing that said terminal has completed said second communication mode-based initialization operation, and then controlling said first base station controller to release said call currently set up with said terminal, upon recognizing that said terminal is ready to hand over to said second base station (see p. 6 [0088-0095] and Fig. 2; shows a UMTS radio access network (UTRAN) including anchor MSC-A [i.e. reads on a first mobile switching center], radio network controller (RNC) 7 [i.e. reads on

a first base station controller], and a GSM radio access network 9, including relay MSC-B [i.e. reads on a second mobile switching center], base station controller (BSC) 11 [i.e. reads on a second base station controller] connected with base station (BTS) 10 [i.e. reads on a second base station]); said second mobile switching center for controlling a second base station controller to which said second base station is connected if said second mobile switching center is notified that said terminal must hand over to said second base station (see p. 6 [0089] and Fig. 5), such that said second mobile switching center pages said terminal, notifying said first mobile switching center that said terminal is ready to hand over to said second base station, upon recognizing that said second base station controller has completed the paging of said terminal (see p. 6 [0090-0092] and Fig. 5), and then notifying said first mobile switching center that a second communication mode-based call setup with said terminal has been completed, upon recognizing that said second base station controller has completed the call setup with said terminal according to a predetermined control (see p. 6 [0090-0092] and Fig. 5); said second base station controller for paging said terminal under the control of said second mobile switching center and performing said call setup with said terminal after completing the paging of said terminal (see p. 6 [0090-0095] and Fig. 5).

Back fails to explicitly teach a roaming gateway for performing a standard conversion operation with respect to messages transmitted and received between said first mobile switching center and said second mobile switching center.

However, the use of a roaming gateway for performing a standard conversion operation and an address mapping with respect to messages transmitted and received

between a first and second mobile switching center supporting different technologies is very well known in the art as taught for example by Jain. Jain teaches a method and system for a GSM mobile station roaming to an IS-41 system, wherein a roaming gateway interfaces between a CDMA mobile switching center (MSC) and a GSM core infrastructure to enable a mobile station subscribed in the GSM core infrastructure to communicate using the CDMA MSC (see p. 1 [0008] and Fig. 1; shows a roaming gateway 32 interfacing IS-41 MSC and GSM core 14 [i.e. includes a GSM MSC]). According to Jain, when a GSM subscribed MS 12 roams into a CDMA area supported by an IS-41 MSC 22, the IS-41 MSC 22 accesses the roaming gateway by sending an authorization request along with the IMSI of the GSM subscribed MS 12 (see p. 2 [0024 & 0026]). Jain further teaches the roaming gateway accesses the GSM core infrastructure and obtains necessary authentication information, and the authentication information is used by the roaming gateway to determine whether the GSM subscribed MS 12 has been authenticated as a subscriber in the GSM core infrastructure (see p. 2 [0026-0027]). According to Jain, assuming authentication is successful, the roaming gateway informs the IS-41 MSC 22 to provide service to the MS 12 by sending the MSC 22 a location message that functions as a registration response, and in this way, the MS 12 essentially is registered with the IS-41 MSC 22 that is associated with the CDMA core infrastructure (see p. 2 [0027]).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using a roaming gateway for performing a standard conversion operation and an address mapping with respect to messages

transmitted and received between a first and second mobile switching center supporting different networks of Jain, to system of Back, to include a roaming gateway for performing a standard conversion operation with respect to messages transmitted and received between said first mobile switching center and said second mobile switching center, in order to permit a seamless use of a dual mode GSM subscribed mobile station when the mobile station roams into a CDMA area, and without requiring a subscription in both a CDMA core and a GSM core as per the teachings of Jain (see p. 1 [0007]).

Regarding claim 2, Back in view of Jain teaches all the limitations of claim 1. Jain further teaches a method, wherein said first mobile switching center is adapted to send a message including an international mobile subscriber identity of said terminal to said roaming gateway to notify said second mobile switching center that said terminal must hand over to said second base station (see p. 2 [0024-0026]).

Regarding claim 3, Back in view of Jain teaches all the limitations of claim 2. Jain further teaches a method, wherein said roaming gateway is adapted to send a message including only a mobile identification number of said international mobile subscriber identity of said terminal to said second mobile switching center to notify said second mobile switching center that said terminal must hand over to said second base station (see p. 2 [0024-0027]).

Regarding claim 4, Back in view of Jain teaches all the limitations of claim 2. Jain further teaches a method, wherein said roaming gateway is adapted to send a message including said mobile identification number and a circuit identity code to said

second mobile switching center to control said second mobile switching center such that said second base station controller sets up said call with said terminal (see p. 2 [0024-0027]).

Regarding claim 6, Back in view of Jain teaches all the limitations of claim 1. Jain further teaches a method, wherein said roaming gateway is adapted to perform standard mapping between said first communication mode of said first mobile switching center and said second communication mode of said second mobile switching center (see p. 2 [0024-0027]).

Regarding claim 9, Back in view of Jain teaches all the limitations of claim 8. Jain further teaches a system, wherein said roaming gateway is adapted to detect a standard of an incoming message from said first mobile switching center or said second mobile switching center and, if the detected standard is different from that of said second or first mobile switching center to which said message is to be transferred, map said standard of said message to be conformable to said standard of said second or first mobile switching center to which said message is to be transferred (see p. 2 [0024-0027]).

Regarding claim 10, Back in view of Jain teaches all the limitations of claim 8. Jain further teaches a system, wherein said first mobile switching center is adapted to send a message including an international mobile subscriber identity of said terminal to said roaming gateway to notify said second mobile switching center that said terminal must hand over to said second base station (see p. 2 [0024-0027]).

Regarding claim 11, Back in view of Jain teaches all the limitations of claim 10. Jain further teaches a system, wherein said roaming gateway is adapted to send a message including only a mobile identification number of said international mobile subscriber identity of said terminal to said second mobile switching center to notify said second mobile switching center that said terminal must hand over to said second base station (see p. 2 [0024-0027]).

Regarding claim 12, Back in view of Jain teaches all the limitations of claim 10. Jain further teaches a system, wherein said roaming gateway is adapted to send a message including said mobile identification number and a circuit identity code to said second mobile switching center to control said second mobile switching center such that said second base station controller performs said call setup with said terminal (see p. 2 [0024-0027]).

Regarding claims 7 and 14, Back in view of Jain teaches all the limitations of claims 1 and 8. Back further teaches a method and system, wherein said first communication mode is an asynchronous communication mode and said second communication mode is a synchronous communication mode (see p. 1 [0003], p. 7 [0108] [i.e. Back meets the limitation "said first communication mode is an asynchronous communication mode and said second communication mode is a synchronous communication mode" since Back teaches a handover between different communication standards such as GSM, UMTS (i.e. is very well known in the art to employ an asynchronous CDMA scheme), GPRS and IMT 2000 (i.e. is very well known in the art to employ a synchronous CDMA 2000 scheme)]).

5. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Back et al., U.S. Publication Number 2004/0156329 A1 (hereinafter Back)** and **Jain et al., U.S. Publication Number 2003/0114155 A1 (hereinafter Jain)** as applied to claims 1 and 8 above, and further in view of **Kotzin et al., U.S. Patent Number 6,108,322 (hereinafter Kotzin).**

Regarding claims 5 and 13, Back in view of Jain teaches all the limitations of claims 1 and 8. Back in view of Jain fails to explicitly teach a method and system, wherein said first base station controller is adapted to determine that said terminal must hand over to said second base station, when neighbor cell information of said terminal is insufficient.

Kotzin teaches a method of enabling handoff in a wireless communication system, wherein when degraded conditions are detected by a mobile station, an expedited process is begun to improve the likelihood of providing information necessary to handover to a viable target candidate station (see col. 2, lines 26-50). According to Kotzin, the mobile station will report measurements of any control channel found to the network and the mobile or serving base station determines which measured and decoded neighbor cell is the strongest and in conjunction with the cellular network, determines if this identified strongest neighbor is available, and if a stronger base is available, the mobile requests a handoff (see col. 6, lines 13-24).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Back and Jain with Kotzin, to include a method of determining that said terminal must hand over from said first base station to said second base

station, when neighbor cell information received from said terminal is insufficient, in order to expedite the process of improving the likelihood of providing information necessary to handover to a viable target candidate station and thus minimizing the handoff time in a communication system.

6. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Back et al., U.S. Publication Number 2004/0156329 A1 (hereinafter Back)** as applied to claims 15 and 18 above, and further in view of **Kotzin et al., U.S. Patent Number 6,108,322 (hereinafter Kotzin)**.

Regarding claims 17 and 19, Back teaches all the limitations of claims 15 and 18. Back fails to explicitly teach a system and a method further comprises, determining that said terminal must hand over from said first base station to said second base station, when neighbor cell information received from said terminal is insufficient.

Kotzin teaches a method of enabling handoff in a wireless communication system, wherein when degraded conditions are detected by a mobile station, an expedited process is begun to improve the likelihood of providing information necessary to handover to a viable target candidate station (see col. 2, lines 26-50). According to Kotzin, the mobile station will report measurements of any control channel found to the network and the mobile or serving base station determines which measured and decoded neighbor cell is the strongest and in conjunction with the cellular network, determines if this identified strongest neighbor is available, and if a stronger base is available, the mobile requests a handoff (see col. 6, lines 13-24).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using neighbor cell information to determine when to perform a handover of Kotzin, to the method of performing a handover between a plurality of different networks of Back, to include a method of determining that said terminal must hand over from said first base station to said second base station, when neighbor cell information received from said terminal is insufficient, in order to expedite the process of improving the likelihood of providing information necessary to handover to a viable target candidate station and thus minimizing the handoff time in a communication system.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Han et al., U.S. Publication Number 2005/0128980 A1 discloses method for performing a handover from a WCDMA system to a CDMA system in a multi-mode mobile communication terminal.

Park, U.S. Publication Number 2004/0137903 A1 discloses apparatus for performing a handover between different mobile communication systems and method for controlling the same.

Ahn et al., U.S. Patent Number 6,681,111 discloses roaming service system for GSM service subscriber in CDMA service area, and method for registering locations and transmitting and receiving signals and short messages using the system.

Kim, U.S. Publication Number 2003/0129981 A1 discloses apparatus and method for accomplishing handoff between mobile communication systems of different generations.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony S. Addy whose telephone number is 571-272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony S. Addy
February 2, 2006

Temica M. Beamer

TEMICA BEAMER
PRIMARY EXAMINER
2/6/06